TESTIMONY OF COLLIN O'MARA BEFORE THE HOUSE ENERGY AND COMMERCE SUBCOMMITTE ON ENERGY AND POWER ON THE ENVIRONMENTAL PROTECTION AGENCY'S PROPOSAL TO TIGHTEN THE NATIONAL AMBIENT AIR QUALTY STANDARDS FOR FINE PARTICULATE MATTER

Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee, my name is Collin O'Mara and I serve as Delaware's Secretary of the Environment and Energy and past Chair of the Ozone Transport Commission. I would like to thank you for the opportunity to discuss the Environmental Protection Agency's proposal to tighten the National Ambient Air Quality Standards ("NAAQS") for Fine Particulate Matter ("$PM_{2.5}$").

Sections 108 and 109 of the federal Clean Air Act ("CAA") govern the establishment, review, and revision, as appropriate, of the national ambient air quality standards to protect public health and welfare, with an adequate margin of safety. The CAA requires periodic review of the air quality criteria – the science upon which the standards are based – and the standards themselves. As part of this process, EPA is required to set NAAQS for particulate matter that is 2.5 microns or less in diameter, or so-called "$PM_{2.5}$".

The $PM_{2.5}$ NAAQS currently in effect include an annual standard of 15 micrograms per cubic meter ($\mu g/m^3$), promulgated in 1997, and a 24-hour standard of 35 $\mu g/m^3$, established in 2006. As a result of litigation, the U.S. Court of Appeals for the District of Columbia Circuit remanded the 2006 annual PM2.5 standard to EPA because the agency failed to explain adequately why the standard provided the requisite protection from both short- and long-term exposures to fine particles, including protection for at-risk populations, including children. When it became clear that EPA would again fail to meet its promised deadlines, many of the State Plaintiffs and ALA filed mandamus petitions in the D.C. Circuit in November 2011 on grounds that EPA had unreasonably delayed in responding to the remand order in the American Farm Bureau case. See D.C. Cir. Case No. 06-1410, Dkt. Nos. 1342305 & 1342371. The court ordered EPA to respond. See id., Dkt. No. 1345477.EPA has just now proposed its response, concluding that the PM2.5 standards established in 2006 are not requisite to protect public health with an adequate margin of safety, as required by the CAA, and that the proposed, more stringent, revisions are warranted to provide the appropriate degree of increased public health protection.

This proposed action by EPA is long overdue and necessary. Despite significant efforts in Delaware to reduce $PM_{2.5}$ and other traditional pollutants, our state continues to suffer adverse health impacts from $PM_{2.5}$ transported into our state from upwind sources. A strengthened national standard will achieve both local reductions, but will also bring us one step closer to reducing the transport pollution that continues to plague downwind states.

The latest science supports EPA's action:

- In December 2009, the EPA published a review of the particulate matter-related health science literature in the Integrated Science Assessment ("ISA"), which is a required part of the promulgation of new or revised NAAQS. The ISA concluded

that the epidemiologic, controlled human exposure, and toxicological studies provide evidence for increased susceptibility for various populations, including children and older adults, people with pre-existing cardiopulmonary diseases, and people with a lower socio-economic status. EPA additionally concluded that both long-term and short-term exposure to $PM_{2.5}$ is causally associated with cardiovascular effects and premature mortality.

- In June 2010, EPA published the "Quantitative Health Risk Assessment for Particulate Matter" ("Health Risk Assessment") to quantify exposure and risk. This assessment of health impacts of exposure to PM focused on 15 urban study areas. This analysis estimated that about 63,000 to 88,000 premature deaths each year in the United States are related to $PM_{2.5}$ exposure.
- In the 2012 "State of the Air" report for Delaware, the American Lung Association reported that there are 897,934 people living in Delaware who are at risk from air pollution, of whom 205,765 were under 18 years old and 129,277 were 65 years or older. Of these, there were:

    - 69,012 adult asthmatics and 27,795 child asthmatics;
    - 30,282 residents with chronic bronchitis;
    - 13,760 residents with emphysema; and
    - 234,056 residents with cardiovascular disease.

    Those individuals impacted by ozone are also impacted by higher levels of $PM_{2.5}$ pollution.

- In April 2011, EPA published the "Policy Assessment for the Review of Particulate Matter National Ambient Air Quality Standards" in which EPA staff recommends that consideration be given to revising the $PM_{2.5}$ NAAQS to provide increased protection for both long- and short-term exposures. EPA staff concluded that evidence supports revising the annual standard in the range of 11-13 $\mu g/m^3$ (with evidence most strongly supporting an annual standard in the 11-12 $\mu g/m^3$ range). Staff also recommended either leaving the current 24-hour standard of 35 $\mu g/m^3$ in place or strengthening it to 30 $\mu g/m^3$ (particularly in combination with an annual standard of 13 $\mu g/m^3$). In its September 2010 comments on the second draft of the Policy Assessment, the Clean Air Scientific Advisory Committee concluded that these levels "are supported by the epidemiological and toxicological evidence" as well as by the Integrated Science Assessment and the Health Risk Assessment.

EPA has proposed to revise the annual PM2.5 standard by lowering the level to within a range of 12.0 to 13.0 micrograms per cubic meter (μg/m3), and to retain the 24-hour PM2.5 standard. EPA exercised moderation. Following EPA staff recommendations the agency could have selected, for example, a lower end of the range—i.e., 11; they could have set a tighter daily standard—below 35; and they could have set a more stringent PM_{10} standard. In other words, the proposal could have been more stringent to achieve a truly health-based standard. The public deserves the right to know whether the air they are breathing is safe, and the current NAAQS

gives a false sense of security that the air the public is breathing is safe when we know thousands more may be dying prematurely because of an outdated and inadequate $PM_{2.5}$ standard.

Finalizing this action at the lower end of the proposal – 12.0 ug/m3 – will provide increased protection for children, older adults, persons with pre-existing heart and lung disease, and other at-risk populations against an array of PM2.5-related adverse health effects that include premature mortality, increased hospital admissions and emergency department visits, and development of chronic respiratory disease.

Some have questioned whether we can afford this rule. Even though EPA is statutorily prohibited from considering the costs of implementing NAAQS (as confirmed by the U.S. Supreme Court in *Whitman v. American Trucking Associations*), EPA has conducted a Regulatory Impact Analysis (RIA) that provides information on the potential costs and benefits of attaining several alternative PM2.5 standards. Our calculation based on information in the EPA proposal is that the benefits of a protective 12.0 ug/m3 NAAQS outweigh the cost by between 30:1 and 85:1.

Our experience in Delaware reinforces the cost-benefit analysis for this standard. We have proven in Delaware that the measures which will achieve a health-based PM2.5 standard are both technically feasible and cost-effective. Under the CAA, states are given the flexibility to meet the standards in the most cost-effective manner by considering economic impacts when implementing rules to meet the more health protective standard—and we did just this in Delaware. For example, in 2006 we promulgated a regulation that required NOx, SO2, and Hg emission controls on all of our coal and oil fired power plants. This multi-pollutant approach benefited the power plants because they were afforded the opportunity to design emission controls that complimented each other. These controls aided in our attainment of the ozone NAAQS by reducing NOx, and the $PM_{2.5}$ NAAQS by reducing NOx and SO2. In addition, although direct $PM_{2.5}$ was not specifically regulated, direct PM2.5 (filterable and condensable) emissions were reduced from 2006 levels by 63% beginning 2012 (1750 tons/year to 643 tons/year) and 83% by the end of 2013 (1750 tons/year to 294 tons/year). Furthermore, acid gas emissions were reduced to the extent that these units will no longer top the Toxics Release Inventory (TRI) list in Delaware.

We have also worked with some of the largest companies in Delaware, including NRG, Calpine, PBF, DuPont, Perdue, Mountaire, Evraz Steel, and Croda, to reduce their emissions, including PM2.5. Most of these projects have been public-private partnerships with state providing assistance either with the financing or expedited permitting to ensure reductions across multiple pollutants, timely project completion, creation of construction jobs and improved economic competitiveness.

It is also important to note that other regulations in effect, including the Transport Rule and the Utility Air Toxics Rule, will significantly reduce PM2.5 and help many jurisdictions achieve attainment in a timely fashion without adopting significant additional regulations. In addition, reductions from improved vehicle standards and cleaner fuels will also reduce multiple pollutants including PM2.5. For this among other reasons, we support adoption of national

measures by EPA, particularly when local efforts alone are not sufficient to address multi-state transport challenges such as reducing $PM_{2.5}$.

I thank you for the opportunity to discuss this important proposal and look forward to your questions.